

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:21:43 ON 12 OCT 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:21:52 ON 12 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

DICTIONARY FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

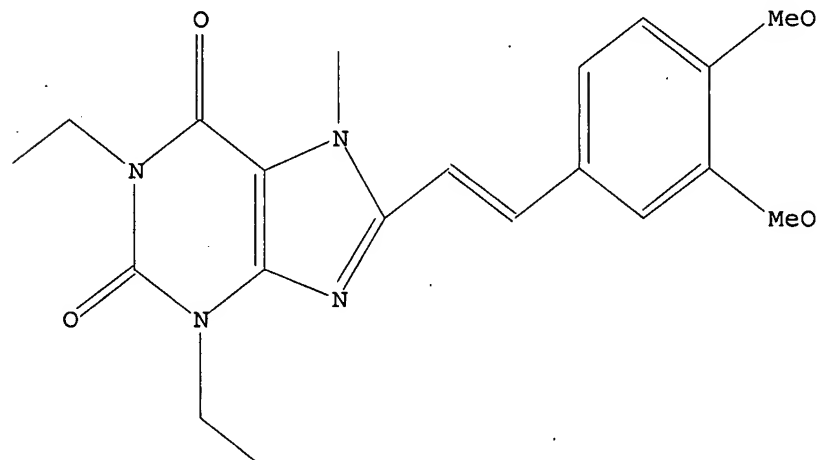
Uploading C:\Program Files\Stnexp\Queries\xanthine.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss fam  
'SSS' IS NOT VALID HERE  
For additional help, enter "HELP SEARCH".

=> s l1 sam fam  
SAMPLE SEARCH INITIATED 15:22:21 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1 TO 80  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA FAM SAM L1

=> s l1 fam full  
FULL SEARCH INITIATED 15:22:27 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 58 TO ITERATE

100.0% PROCESSED 58 ITERATIONS 12 ANSWERS  
SEARCH TIME: 00.00.01

L3 12 SEA FAM FUL L1

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	67.70	67.91

FILE 'CAPLUS' ENTERED AT 15:22:32 ON 12 OCT 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Oct 2007 VOL 147 ISS 17  
FILE LAST UPDATED: 11 Oct 2007 (20071011/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3  
L4 87 L3

=> d ti au so py 1-10

L4 ANSWER 1 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Amphetamine and the adenosine A2A antagonist KW-6002 enhance the effects  
 of conditional temporal probability of a stimulus in rats  
 AU O'Neill, Martin; Brown, Verity J.  
 SO Behavioral Neuroscience (2007), 121(3), 535-542  
 CODEN: BENEDJ; ISSN: 0735-7044  
 PY 2007

L4 ANSWER 2 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI The effect of striatal dopamine depletion and the adenosine A2A antagonist  
 KW-6002 on reversal learning in rats  
 AU O'Neill, Martin; Brown, Verity J.  
 SO Neurobiology of Learning and Memory (2007), 88(1), 75-81  
 CODEN: NLMEFR; ISSN: 1074-7427  
 PY 2007

L4 ANSWER 3 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compounds for the treatment of auricular fibrillation  
 IN Franco Fernandez, Rafael; Ciruela Alferez, Francisco; Lluís Biset, Carmen;  
 Mueller, Christa; Cinca Cuscullola, Joan; Hove-Madsen, Leif  
 SO PCT Int. Appl., 33pp.  
 CODEN: PIXXD2  
 PY 2007  
 2007  
 2007

L4 ANSWER 4 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Characterization of the potency, selectivity, and pharmacokinetic profile  
 for six adenosine A2A receptor antagonists  
 AU Yang, Ming; Soohoo, Daniel; Soelaiman, Sandriyana; Kalla, Rao; Zablocki,  
 Jeff; Chu, Nancy; Leung, Kwan; Yao, Lina; Diamond, Ivan; Belardinelli,  
 Luiz; Shryock, John C.  
 SO Naunyn-Schmiedeberg's Archives of Pharmacology (2007), 375(2), 133-144  
 CODEN: NSAPCC; ISSN: 0028-1298  
 PY 2007

L4 ANSWER 5 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compositions and methods for inhibiting neurodegeneration  
 IN Kalb, Robert Gordon; Mojsilovic-Petrovic, Jelena  
 SO U.S. Pat. Appl. Publ., 36pp.  
 CODEN: USXXCO  
 PY 2007

L4 ANSWER 6 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Forebrain adenosine A2A receptors contribute to L-3,4-  
 dihydroxyphenylalanine-induced dyskinesia in hemiparkinsonian mice  
 AU Xiao, Danqing; Bastia, Elena; Xu, Yue-Hang; Benn, Caroline L.; Cha,  
 Jang-Ho J.; Peterson, Tracy S.; Chen, Jiang-Fan; Schwarzschild, Michael A.  
 SO Journal of Neuroscience (2006), 26(52), 13548-13555  
 CODEN: JNRSDS; ISSN: 0270-6474  
 PY 2006

L4 ANSWER 7 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Identification of non-furan containing A2A antagonists using database  
 mining and molecular similarity approaches  
 AU Richardson, Christine M.; Gillespie, Roger J.; Williamson, Douglas S.;  
 Jordan, Allan M.; Fink, Alexandra; Knight, Antony R.; Sellwood, Daniel M.;  
 Misra, Anil  
 SO Bioorganic & Medicinal Chemistry Letters (2006), 16(23), 5993-5997  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PY 2006

L4 ANSWER 8 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Novel neuroprotection by caffeine and adenosine A2A receptor antagonists  
 in animal models of Parkinson's disease

AU Kalda, Anti; Yu, Liqun; Oztas, Emin; Chen, Jiang-Fan  
SO Journal of the Neurological Sciences (2006), 248(1-2), 9-15  
CODEN: JNSCAG; ISSN: 0022-510X  
PY 2006

L4 ANSWER 9 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Protecting motor neurons from toxic insult by antagonism of adenosine A2a and Trk receptors. [Erratum to document cited in CA145:411022]  
AU Mojsilovic-Petrovic, Jelena; Jeong, Goo-Bo; Crocker, Amanda; Arneja, Amrita; David, Samuel; Russell, David S.; Kalb, Robert G.  
SO Journal of Neuroscience (2006), 26(40), No pp. given  
CODEN: JNRSDS; ISSN: 0270-6474  
PY 2006

L4 ANSWER 10 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Protecting motor neurons from toxic insult by antagonism of adenosine A2a and Trk receptors  
AU Mojsilovic-Petrovic, Jelena; Jeong, Goo-Bo; Crocker, Amanda; Arneja, Amrita; David, Samuel; Russell, David; Kalb, Robert G.  
SO Journal of Neuroscience (2006), 26(36), 9250-9263  
CODEN: JNRSDS; ISSN: 0270-6474  
PY 2006

=> d ti au so py 11-25

L4 ANSWER 11 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Assay development and screening of a serine/threonine kinase in an on-chip mode using caliper nanofluidics technology  
AU Perrin, Dominique; Fremaux, Christele; Scheer, Alexander  
SO Journal of Biomolecular Screening (2006), 11(4), 359-368  
CODEN: JBISF3; ISSN: 1087-0571  
PY 2006

L4 ANSWER 12 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Adenosine A2a receptor antagonists for the treatment of extra-pyramidal syndrome and other movement disorders  
IN Grzelak, Michael; Hunter, John; Pond, Annamarie; Varty, Geoffrey  
SO U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 234,644.  
CODEN: USXXCO  
PY 2006  
2004  
2005  
2005  
2005  
2005  
2006  
2005  
2006  
2007

L4 ANSWER 13 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Preventive and/or therapeutic agent for drug dependence  
IN Kase, Junya; Kurokawa, Masako; Shiozaki, Shizuo; Seno, Naoki  
SO PCT Int. Appl., 46 pp.  
CODEN: PIXXD2  
PY 2006

L4 ANSWER 14 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Adenosine A2a receptor antagonists for the treatment of extrapyramidal syndrome and other movement disorders  
IN Grzelak, Michael; Hunter, John; Pond, Annamarie; Varty, Geoffrey  
SO U.S. Pat. Appl. Publ., 27 pp., Cont.-in-part of U.S. Ser. No. 738,906.  
CODEN: USXXCO

PY 2006  
 2004  
 2005  
 2005  
 2005  
 2005  
 2006  
 2005  
 2006  
 2007

L4 ANSWER 15 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Effects of the A2A adenosine receptor antagonist KW6002 in the nucleus accumbens in vitro and in vivo  
 AU Harper, L. K.; Beckett, S. R.; Marsden, C. A.; McCreary, A. C.; Alexander, S. P. H.  
 SO Pharmacology, Biochemistry and Behavior (2006), 83(1), 114-121  
 CODEN: PBBHAU; ISSN: 0091-3057  
 PY 2006

L4 ANSWER 16 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Parkinson's disease  
 AU Nagai, Masahiro; Nomoto, Masahiro  
 SO Rinsho Yakuri (2005), 36(6), 273-276  
 CODEN: RIYADS; ISSN: 0388-1601  
 PY 2005

L4 ANSWER 17 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Antagonizing an adenosine A2A receptor to ameliorate one or more components of addictive behavior  
 IN Diamond, Ivan F.; Gordon, Adrienne S.  
 SO PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 PY 2006  
 2007  
 2006  
 2006  
 2006  
 2007

L4 ANSWER 18 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI The effect of the adenosine A2A antagonist KW-6002 on motor and motivational processes in the rat  
 AU O'Neill, Martin; Brown, Verity J.  
 SO Psychopharmacology (Berlin, Germany) (2006), 184(1), 46-55  
 CODEN: PSCHDL; ISSN: 0033-3158  
 PY 2006

L4 ANSWER 19 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Interactions between metabotropic glutamate 5 and adenosine A2A receptors in normal and parkinsonian mice  
 AU Kachroo, Anil; Orlando, Lianna R.; Grandy, David K.; Chen, Jiang-Fan; Young, Anne B.; Schwarzschild, Michael A.  
 SO Journal of Neuroscience (2005), 25(45), 10414-10419  
 CODEN: JNRSDS; ISSN: 0270-6474  
 PY 2005

L4 ANSWER 20 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Treatment of Parkinson's disease: what' on the horizon?  
 AU Wu, Stacy S.; Frucht, Steven J.  
 SO CNS Drugs (2005), 19(9), 723-743  
 CODEN: CNDREF; ISSN: 1172-7047  
 PY 2005

L4 ANSWER 21 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preventive and/or therapeutic agent for disease accompanied by chronic muscle/skeleton pain  
 IN Kase, Hiroshi; Takahashi, Isami; Kunori, Shunji; Kobayashi, Minoru; Shiozaki, Shizuo; Shirakura, Shiro  
 SO PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2007  
 2007

L4 ANSWER 22 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI New therapies for the treatment of Parkinson's disease: Adenosine A2A receptor antagonists  
 AU Pinna, Annalisa; Wardas, Jadwiga; Simola, Nicola; Morelli, Micaela  
 SO Life Sciences (2005), 77(26), 3259-3267  
 CODEN: LIFSAK; ISSN: 0024-3205  
 PY 2005

L4 ANSWER 23 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Adenosine A2A receptor antagonists for parkinson's disease: rationale, therapeutic potential and clinical experience  
 AU Hauser, Robert A.; Schwarzschild, Michael A.  
 SO Drugs & Aging (2005), 22(6), 471-482  
 CODEN: DRAGE6; ISSN: 1170-229X  
 PY 2005

L4 ANSWER 24 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Purines are self-renewal signals for neural stem cells, and purine receptor antagonists promote neuronal and glial differentiation therefrom  
 IN Goldman, Steven A.; Nedergaard, Maiken; Lin, Jane  
 SO U.S. Pat. Appl. Publ., 15 pp.  
 CODEN: USXXCO  
 PY 2005  
 2005

L4 ANSWER 25 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Xanthin derivative hydrates, and pharmaceutical compositions containing the same  
 IN Sato, Norie; Kita, Shoji; Aoki, Noboru; Uchimura, Tatsuo  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 PY 2005

=> d abs 14 25

L4 ANSWER 25 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 AB The invention provides a hydrate of (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methyl-3,7-dihydro-1H-purine-2,6-dione (I) or its salt for use as an adenosine A2 receptor antagonist for treatment of related disease, wherein the hydrate form of I shows improved bioavailability as compared with anhydride form of I or its salt. For example, a tablet containing I hexahydrate 20, lactose 143.4, potato starch 30, hydroxypropyl cellulose 6, magnesium stearate 0.6 mg was formulated.

=> d ti au so py 26-40 14

L4 ANSWER 26 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Drug for treating migraine  
 IN Takeuchi, Megumi; Takayama, Makoto; Shirakura, Shiro; Kase, Hiroshi  
 SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

PY 2005  
2005  
2006  
2007

L4 ANSWER 27 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Xanthine derivatives and salts and compositions for preventing and/or  
 treating higher brain dysfunction  
 IN Kase, Hiroshi; Nakagawa, Yutaka; Shiozaki, Shizuo; Kobayashi, Minoru;  
 Toki, Shinichiro; Seno, Naoki; Ikeda, Ken  
 SO PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2

PY 2005  
2005  
2005  
2006  
2007  
2007  
2007  
2006  
2007

L4 ANSWER 28 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Istradefylline, a novel adenosine A2A receptor antagonist, for the  
 treatment of Parkinson's disease  
 AU Jenner, Peter  
 SO Expert Opinion on Investigational Drugs (2005), 14(6), 729-738  
 CODEN: EOIDER; ISSN: 1354-3784

PY 2005

L4 ANSWER 29 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pharmacological validation of a mouse model of L-DOPA-induced dyskinesia  
 AU Lundblad, M.; Usiello, A.; Carta, M.; Hakansson, K.; Fisone, G.; Cenci, M.  
 A.  
 SO Experimental Neurology (2005), 194(1), 66-75  
 CODEN: EXNEAC; ISSN: 0014-4886

PY 2005

L4 ANSWER 30 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Method of stabilizing diarylvinylene compound  
 IN Uchida, Akihiro; Ishikawa, Yasuhiro; Ueno, Yasuhiko; Kaji, Kiichiro;  
 Aimoto, Masaharu; Kaneko, Naoki  
 SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2

PY 2005  
2005  
2005  
2006  
2006  
2006

L4 ANSWER 31 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI medicinal compositions containing adenosine A2A receptor antagonists and  
 dopamine agonists  
 IN Kase, Hiroshi; Kobayashi, Minoru; Shiozaki, Shizuo; Mori, Akihisa; Senoo,  
 Naoki  
 SO Jpn. Kokai Tokkyo Koho, 22 pp.  
 CODEN: JKXXAF

PY 2005

L4 ANSWER 32 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI KW-6002 protects from MPTP induced dopaminergic toxicity in the mouse  
 AU Pierri, Mette; Vaudano, Elisabetta; Sager, Thomas; Englund, Ulrica

SO Neuropharmacology (2005), 48(4), 517-524  
 CODEN: NEPHBW; ISSN: 0028-3908  
 PY 2005

L4 ANSWER 33 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Medicinal compositions containing adenosine A2A receptor antagonists and  
 other antidepressants  
 IN Kase, Hiroshi; Kobayashi, Minoru; Shiozaki, Shizuo; Mori, Akihisa; Seno,  
 Naoki  
 SO PCT Int. Appl., 47 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2006  
 2006  
 2006

L4 ANSWER 34 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Solid pharmaceutical compositions containing xanthine derivatives and  
 crystalline cellulose  
 IN Uchida, Akihiro; Ishikawa, Yasuhiro; Ueno, Yasuhiko; Kaji, Kiichiro;  
 Tottori, Tuneaki  
 SO PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2005  
 2006  
 2006  
 2006

L4 ANSWER 35 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Synthesis of alkyne derivatives of a novel triazolopyrazine as A2A  
 adenosine receptor antagonists  
 AU Yao, Gang; Haque, Serajul; Sha, Li; Kumaravel, Gnanasambandam; Wang, Joy;  
 Engber, Thomas M.; Whalley, Eric T.; Conlon, Patrick R.; Chang, Hexi;  
 Kiesman, William F.; Petter, Russell C.  
 SO Bioorganic & Medicinal Chemistry Letters (2005), 15(3), 511-515  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PY 2005

L4 ANSWER 36 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Antiepileptic agent  
 IN Ichikawa, Shunji; Takashima, Chiemi; Imma, Hironori; Shimada, Junichi  
 SO PCT Int. Appl., 23 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2006  
 2006

L4 ANSWER 37 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI A method using an adenosine A2A receptor antagonist for treating an  
 anxiety disorder  
 IN Kase, Hiroshi; Seno, Naoki; Shiozaki, Shizuo; Kobayashi, Minoru; Kase,  
 Junya  
 SO PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 PY 2004  
 2004  
 2004  
 2006  
 2006  
 2006

2006  
2006  
2006  
2005  
2007

L4 ANSWER 38 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Microcrystals of (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methyl-3,7-dihydro-1H-purine-2,6-dione  
IN Kuroda, Kazutoshi; Aoki, Noboru; Ochiai, Toshiro; Uchida, Akihiro; Ishikawa, Yasuhiro; Kigoshi, Makoto; Hayakawa, Eiji; Asanome, Kazuki  
SO PCT Int. Appl., 22 pp.  
CODEN: PIXXD2

PY 2004  
2004  
2004  
2006  
2006  
2006  
2007

L4 ANSWER 39 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Novel Diamino Derivatives of [1,2,4]Triazolo[1,5-a][1,3,5]triazine as Potent and Selective Adenosine A2a Receptor Antagonists  
AU Vu, Chi B.; Pan, Deborah; Peng, Bo; Kumaravel, Gnanasambandam; Smits, Glenn; Jin, Xiaowei; Phadke, Deepali; Engber, Thomas; Huang, Carol; Reilly, Jennifer; Tam, Stacy; Grant, Donna; Hetu, Gregg; Petter, Russell C.  
SO Journal of Medicinal Chemistry (2005), 48(6), 2009-2018  
CODEN: JMCMAR; ISSN: 0022-2623

PY 2005

L4 ANSWER 40 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI A method using (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine for treating behavioral disorders  
IN Shiozaki, Shizuo; Shimada, Junichi; Kase, Hiroshi; Shindo, Mayumi  
SO PCT Int. Appl., 24 pp.  
CODEN: PIXXD2

PY 2004  
2004  
2004  
2004  
2005  
2005  
2006  
2006  
2006  
2005  
2006

=> d ti so py au 80-87

L4 ANSWER 80 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Therapeutic agent for neural degeneration  
SO PCT Int. Appl., 20 pp.  
CODEN: PIXXD2

PY 1999  
1999  
2001  
2000  
2006  
2006  
2006

2006  
2001  
2003  
2004  
2004  
2006  
2006

IN Shimada, Junichi; Kurokawa, Masako; Ikeda, Ken; Susuki, Fumio; Kuwana, Yoshihisa

L4 ANSWER 81 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Adenosine A2A receptors modify motor function in MPTP-treated common marmosets

SO NeuroReport (1998), 9(12), 2857-2860

CODEN: NERPEZ; ISSN: 0959-4965

PY 1998

AU Kanda, Tomoyuki; Tashiro, Tomomi; Kuwana, Yoshihisa; Jenner, Peter

L4 ANSWER 82 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Adenosine A2A antagonist: a novel antiparkinsonian agent that does not provoke dyskinesia in parkinsonian monkeys

SO Annals of Neurology (1998), 43(4), 507-513

CODEN: ANNED3; ISSN: 0364-5134

PY 1998

AU Kanda, Tomoyuki; Jackson, Michael J.; Smith, Lance A.; Pearce, Ronald K. B.; Nakamura, Joji; Kase, Hiroshi; Kuwana, Yoshihisa; Jenner, Peter

L4 ANSWER 83 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Adenosine A2A antagonists with potent anti-cataleptic activity

SO Bioorganic & Medicinal Chemistry Letters (1997), 7(18), 2349-2352

CODEN: BMCLE8; ISSN: 0960-894X

PY 1997

AU Shimada, Junichi; Koike, Nobuaki; Nonaka, Hiromi; Shiozaki, Shizuo; Yanagawa, Koji; Kanda, Tomoyuki; Kobayashi, Hiroyuki; Ichimura, Michio; Nakamura, Joji; Kase, Hiroshi; Suzuki, Fumio

L4 ANSWER 84 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of uracil derivatives by reduction and amidation

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

PY 1997

2006

IN Miwa, Keiichi; Ito, Katsuhiko; Kato, Nobuyuki; Kuge, Yukyasu; Kasai, Masaji; Tomioka, Shinji

L4 ANSWER 85 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of xanthine derivatives for treatment of Parkinson's disease

SO U.S., 61 pp. Cont.-in-part of U.S. Ser. No. 42,535, abandoned.

CODEN: USXXAM

PY 1996

1994

1997

1996

IN Suzuki, Fumio; Shimada, Junichi; Koike, Nobuaki; Nakamura, Joji; Shiozaki, Shizuo; Ichikawa, Shunji; Ishii, Akio; Nonaka, Hiromi

L4 ANSWER 86 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN

TI preparation of xanthine derivatives as antidepressants

SO PCT Int. Appl., 173 pp.

CODEN: PIXXD2

PY 1994

1994

2002

1999

2002  
 2002  
 2002  
 2003  
 1996  
 1994  
 IN Suzuki, Fumio; Shimada, Junichi; Ishii, Akio; Nakamura, Joji; Ichikawa, Shunji; Kitamura, Shigeto; Koike, Nobuaki  
  
 L4 ANSWER 87 OF 87 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Therapeutic agents for Parkinson's disease  
 SO Eur. Pat. Appl., 82 pp.  
 CODEN: EPXXDW  
 PY 1994  
 1999  
 1994  
 2000  
 1994  
 1999  
 2000  
 2000  
 2000  
 2000  
 IN Suzuki, Fumio; Shimada, Junichi; Koike, Nobuaki; Nakamura, Joji; Shiozaki, Shizuo; Ichikawa, Shunji; Nonaka, Hiromi

=> d his

(FILE 'HOME' ENTERED AT 15:21:43 ON 12 OCT 2007)

FILE 'REGISTRY' ENTERED AT 15:21:52 ON 12 OCT 2007

L1 STRUCTURE UPLOADED  
 L2 0 S L1 SAM FAM  
 L3 12 S L1 FAM FULL

FILE 'CAPLUS' ENTERED AT 15:22:32 ON 12 OCT 2007

L4 87 S L3

=> s anxiety or posttraumatic(a)stress

17878 ANXIETY  
 49 ANXIETIES  
 17914 ANXIETY  
 (ANXIETY OR ANXIETIES)  
 1346 POSTTRAUMATIC  
 552547 STRESS  
 98128 STRESSES  
 591748 STRESS  
 (STRESS OR STRESSES)  
 537 POSTTRAUMATIC(A)STRESS  
 L5 18282 ANXIETY OR POSTTRAUMATIC(A)STRESS

=> s l4 and l5

L6 1 L4 AND L5

=>

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:23:17 ON 12 OCT 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:23:26 ON 12 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

DICTIONARY FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\553250.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 13:24:06 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5924 TO ITERATE

33.8% PROCESSED 2000 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 113865 TO 123095

PROJECTED ANSWERS: 4783 TO 6827

L2 50 SEA SSS SAM L1

=> s l1 sss full  
FULL SEARCH INITIATED 13:24:48 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 119488 TO ITERATE

100.0% PROCESSED 119488 ITERATIONS  
SEARCH TIME: 00.00.04

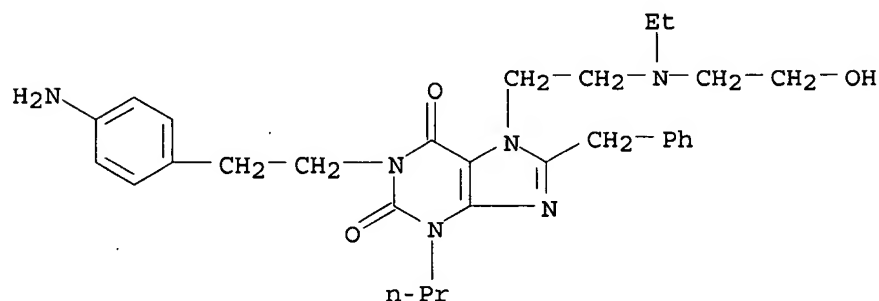
5419 ANSWERS

L3 5419 SEA SSS FUL L1

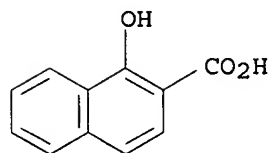
=> d scan

L3 5419 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN INDEX NAME NOT YET ASSIGNED  
MF C29 H38 N6 O3 . 2 C11 H8 O3 . 21/2 H2 O

CM 1

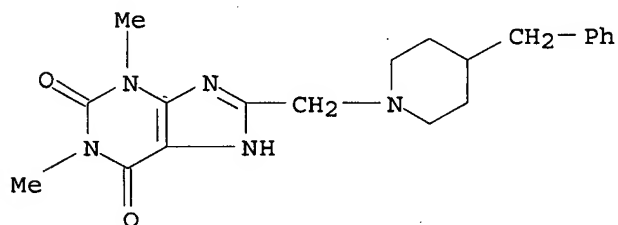


CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 5419 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 1H-Purine-2,6-dione, 3,9-dihydro-1,3-dimethyl-8-[[4-(phenylmethyl)-1-piperidinyl]methyl]-  
MF C20 H25 N5 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

173.45

173.66

FILE 'CAPLUS' ENTERED AT 13:25:34 ON 12 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Oct 2007 VOL 147 ISS 17

FILE LAST UPDATED: 11 Oct 2007 (20071011/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

L4 1502 L3

=> s anxiety or posttraumatic(a)stress(a)disorder or panic(a)disorder

17878 ANXIETY

49 ANXIETIES

17914 ANXIETY

(ANXIETY OR ANXIETIES)

1346 POSTTRAUMATIC

552547 STRESS

98128 STRESSES

591748 STRESS

(STRESS OR STRESSES)

264989 DISORDER

210155 DISORDERS

422688 DISORDER

(DISORDER OR DISORDERS)

499 POSTTRAUMATIC(A)STRESS(A)DISORDER

2610 PANIC

3 PANICS

2611 PANIC

(PANIC OR PANICS)

264989 DISORDER

210155 DISORDERS

422688 DISORDER

(DISORDER OR DISORDERS)

1880 PANIC(A)DISORDER

L5 18395 ANXIETY OR POSTTRAUMATIC(A)STRESS(A)DISORDER OR PANIC(A)DISORDER

=> s l4 and l5

L6 7 L4 AND L5

=> d ti au ab so py 1-7

L6 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI Combinations comprising PPAR agonists

IN Maher, William; Mercuri, Michele; Nevatia, Meenakshi; Chen, Hong; Wang, Pei-Ran

AB The present invention relates to a pharmaceutical composition comprising a PPAR agonist, or pharmaceutically acceptable salts thereof, alone or in combination with at least one active ingredient selected from the group consisting of (i) HDL increasing compds.; (ii) antidiabetics; (iii) an antihypertensive agent; (iv) cholesterol absorption modulator; (v) apo-A1 analogs and mimetics; (vi) renin inhibitors; (vii) thrombin inhibitors; (viii) aldosterone inhibitors; (ix) GLP-1 agonists; (x) glucagon receptor antagonists; (xi) cannabinoid receptor 1 antagonists; (xii) antiobesity agents; and (xiii) inhibitors of platelet aggregation or, in each case, a pharmaceutically acceptable salt thereof; and optionally a pharmaceutically acceptable carrier. The pharmaceutical composition may be employed for the treatment of addictions (for example, nicotine and cocaine), dyslipidemia, hyperlipidemia, hypercholesterolemia, atherosclerosis, hypertriglyceridemia, heart failure, myocardial infarction, vascular diseases, cardiovascular diseases, stroke, intermittent claudication, restenosis after PCTA, hypertension, obesity including reduction in CV risk in obese patients, inflammation, arthritis, cancer including breast, colon and prostate cancer, Alzheimer's disease, skin disorders, respiratory diseases, ophthalmic disorders, IBDs (irritable bowel disease), Crohn's disease, hypofibrinolysis, hypercoagulable state, metabolic/cardiometabolic syndrome, elevated CRP, appearance of microalbuminuria, reduction of proteinuria, renal failure (DM, non-DM), NASH (non alc. steato-hepatitis) non-alc. fatty liver, CV events in patients with high CRP, vascular dementia, psoriasis, ischemia reperfusion injury, asthma, COPD, eosinophilia, RA, airway hyperresponsiveness (AHR), inflammatory digestive diseases (e.g., ulcerative colitis), and diseases of antigen-induced inflammatory responses. The compds. of the present invention are particularly useful in mammals as hypoglycemic agents for the treatment and prevention of conditions such as impaired glucose tolerance, hyperglycemia, insulin resistance, type-1 and type-2 diabetes and Syndrome X. Also contemplated is the administration of the combinations of the present invention for the improvement of cardiac metabolism and cardioprotection in heart transplant patients, to facilitate smoking cessation or reduction and to prevent or treat conditions associated with smoking.

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

PY 2006

2006

2006

2007

2007

2007

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synergy of dopamine D2 and adenosine A2 receptors activates protein kinase A (PKA) signaling via  $\beta/\gamma$  dimers, and use in the treatment of drug abuse and drug withdrawal

IN Gordon, Adrienne S.; Diamond, Ivan F.; Yao, Lina

AB The invention pertains to the discovery that a dopamine receptor agonist can activate PKA signaling and/or can act synergistically with an adenosine receptor to activate such signaling. In various embodiments, the invention exploits the synergy between the dopamine receptor pathway and an adenosine receptor pathway to provide methods of mitigating one or more symptoms produced by the chronic consumption of a substance of abuse or to mitigate one or more physiol. and/or behavioral symptoms associated with cessation of chronic consumption of a substance of abuse. In certain

embodiments, the methods involve administering to a mammal an effective amount of an adenosine receptor antagonist and an effective amount of a dopamine receptor antagonist, where the effective amount of the adenosine receptor antagonist is lower than the effective amount of an adenosine receptor antagonist administered without the dopamine receptor antagonist.

SO PCT Int. Appl., 152 pp.

CODEN: PIXXD2

PY 2003

2004

2003

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI The anxiogenic-like effect of caffeine in two experimental procedures measuring anxiety in the mouse is not shared by selective A2A adenosine receptor antagonists

AU El Yacoubi, Malika; Ledent, Catherine; Parmentier, Marc; Costentin, Jean; Vaugeois, Jean-Marie

AB The elevated plus-maze and the light/dark box are two established anxiety tests in rodents, which are useful to screen putative anxiogenic effects of drugs. Caffeine is well known to promote anxious behavior in humans and animal models, but the precise site of action of the drug is still a matter of debate. The present study investigated whether the anxiogenic effects of caffeine observed in mice depend on the blockade of A2A receptor. First, the effects induced by the non-selective drug caffeine were compared with those elicited by two selective A2A receptor antagonists over a wide range of doses in the same exptl. conditions. The effects of A2A or A1 adenosine receptor agonists and of a selective A1 adenosine receptor antagonist were also investigated. Second, wild-type and A2A receptor knockout mice offered another approach to delineate the role played by A2A receptor in caffeine's anxiogenic effects. Mice were exposed to the elevated plus-maze or to the light/dark box for 5 min after acute or chronic administration of tested drugs. Caffeine acutely administered (50 or 100 mg/kg IP) induced anxiety-like effects in both procedures. Its chronic administration (50 mg/kg IP twice daily) for 1 wk or consumption in the drinking water (0.3 g/l) for 8 days or 2 mo were also anxiogenic in the plus-maze test. The A2A receptor antagonists ZM241385 (up to 60 mg/kg IP) and SCH58261 (up to 10 mg/kg IP) were devoid of acute effects in both tests. One week administration of ZM241385 (30 mg/kg IP) or SCH58261 (3 mg/kg IP) had no effects in the plus-maze test. An antagonist (DPCPX) and an agonist (CPA) at A1 receptors had no acute effects on anxiety-related indexes, whereas an A2A receptor agonist (CGS 21680) displayed non-specific motor effects in the plus-maze test. Acute administration of caffeine (50 mg/kg IP) induced no clear-cut anxiety-like effects in the plus-maze test in A2A receptor knockout mice that exhibited higher basal anxiety levels than wild-type mice. Chronic administration (50 mg/kg IP twice daily) for 1 wk elicited less anxiety-like behavior in A2A receptor knockout than in wild-type mice. Adaptive mechanisms following mutation in A2A receptors or their long-term blockade after chronic ingestion of caffeine may be responsible for increase proneness to anxiety. However, the short-term anxiety-like effect of caffeine in mice might not be related solely to the blockade of adenosine A2A receptors, since it is not shared by A2A selective antagonists.

SO Psychopharmacology (Berlin) (2000), 148(2), 153-163

CODEN: PSCHDL; ISSN: 0033-3158

PY 2000

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI The Effects of Adenosine Ligands R-PIA and CPT on Ethanol Withdrawal

AU Gatch, M. B.; Wallis, C. J.; Lal, H.

AB The potential anxiogenic or anxiolytic effects of R(-)-N6-(2-phenylisopropyl)adenosine (R-PIA), an adenosine agonist, and 8-cyclopentyl-1,3-dimethylxanthine (CPT), an adenosine antagonist, were

tested during chronic exposure to ethanol and to ethanol-induced withdrawal in rats. Effects on anxiety were measured by the elevated plus maze and dark-light box. Ethanol consumption and preference was tested in an addnl. experiment. In testing of elevated plus maze performance during withdrawal from ethanol, R-PIA produced no change in the anxiety-related behaviors of total arm entries and percent open arm entries, but produced a significant decrease in percent open arm time. CPT produced at least partial recovery from the anxiogenic effects of ethanol withdrawal on all three measures of elevated plus maze performance, although peak effects were seen at the intermediate dose of CPT (0.08 mg/kg) for total arm entries and percent open arm time. CPT also showed anxiolytic effects at low to intermediate doses (0.04, 0.08 mg/kg) in the dark-light box. CPT did not reduce the preference for ethanol over water or the total consumption of ethanol over a range of ethanol doses. In summary, the adenosine agonist, R-PIA, exacerbated the effects of ethanol withdrawal, whereas the adenosine antagonist, CPT, at least partially blocked the anxiogenic effects produced by ethanol withdrawal. These results suggest that adenosine antagonists, at least at some doses, may be useful for ameliorating the anxiogenic effects produced by ethanol withdrawal, although it does not appear useful for reducing consumption.

SO Alcohol (New York) (1999), 19(1), 9-14

CODEN: ALCOEX; ISSN: 0741-8329

PY 1999

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI Adenosine A1 receptors modulate anxiety in CD1 mice

AU Florio, Chiara; Prezioso, Anita; Papaioannou, Aristotele; Vertua, Rodolfo

AB The effect of the selective adenosine A1 receptor agonist

2-chloro-N6-cyclopentyladenosine (CCPA) was investigated in CD1 mice by the elevated plus-maze and the light/dark test, two models for measuring anxiety in rodents. CCPA, administered i.p., had an anxiolytic effect at 0.3 nmol/kg in the elevated plus-maze and at 1 nmol/kg in the light/dark test. Brain levels of 22 nM were found after administration of 100 nmol/kg CCPA, as measured by ex vivo binding expts. These values are consistent with the occupancy of adenosine A1 but not A2 receptors by CCPA, and suggest that the anxiolytic-like action of CCPA may be mediated by centrally located adenosine A1 receptors. Both CPT, a selective adenosine A1 receptor antagonist, and IBMX, a non-selective adenosine antagonist, had an anxiogenic effect in the two tests. It is thus possible that purinergic neurons may be involved in the tonic modulation of affective state in mice.

SO Psychopharmacology (Berlin) (1998), 136(4), 311-319

CODEN: PSCHDL; ISSN: 0033-3158

PY 1998

L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI Effects of xanthine derivatives in a light/dark test in mice and the contribution of adenosine receptors

AU Imaizumi, Masahiro; Miyazaki, Shuichi; Onodera, Kenji

AB We investigated the effects of adenosine receptor antagonists, caffeine, theophylline, 8-phenyltheophylline, and 8-cyclopentyl-1,3-dipropylxanthine (DPCPX), in a light/dark test in mice. All antagonists decreased the time spent in the light zone in this test, which suggested that these compds. have anxiogenic effects. The anxiogenic effects of theophylline were reduced by pretreatment with CGS 21680, an A2-selective agonist, but not by N6-cyclopentyladenosine (CPA), an A1-selective agonist. However, the antagonism of the theophylline-induced anxiogenic effects by CGS 21680 was only observed in the time spent in the light zone, and DPCPX-induced anxiogenic effects were neither reversed by CGS 21680 nor by CPA. Finally, it is notable that xanthine-derived adenosine antagonists tested here commonly showed anxiogenic effects in the light/dark test in mice. It is suggested that there is a minor contribution of adenosine receptors to these effects, although theophylline-induced anxiogenic effects were

antagonized by an A2 receptor agonist.

SO Methods and Findings in Experimental and Clinical Pharmacology (1994),  
16(9), 639-44  
CODEN: MFEPDX; ISSN: 0379-0355

PY 1994

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

TI 8-Substituted theophyllines for alleviating anxiety in mammals

IN Stein, Herman Hal; Goodsell, Elizabeth

AB The title substituted theophyllines (I, R=Me, Et, Pr, iso-Pr, pentyl,  
cyclopentyl, hexyl), useful in the treatment of depression were prepared  
from 5,6-diamino-1,3-dimethyluracil and an acid RCO<sub>2</sub>H (Hager, et al., CA  
49: 3179d).

SO U.S., 3 pp.  
CODEN: USXXAM

PY 1971

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	34.22	207.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.46	-5.46

FILE 'REGISTRY' ENTERED AT 13:28:35 ON 12 OCT 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2  
DICTIONARY FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\xanthine.str

L7 STRUCTURE UPLOADED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	208.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

CA SUBSCRIBER PRICE

0.00

-5.46

FILE 'CAPLUS' ENTERED AT 13:29:03 ON 12 OCT 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Oct 2007 VOL 147 ISS 17  
FILE LAST UPDATED: 11 Oct 2007 (20071011/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 17 sss sam

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 13:29:14 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4 TO 200  
PROJECTED ANSWERS: 1 TO 80

L8 1 SEA SSS SAM L7

L9 1 L8

=> d ti au abs so py

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Myocardial adenosine A2a receptor imaging of rabbit by PET with  
[11C]KF17837  
AU Ishiwata, Kiichi; Sakiyama, Yojiro; Sakiyama, Takayo; Shimada, Junichi;  
Toyama, Hinako; Oda, Keiichi; Suzuki, Fumio; Senda, Michio  
AB Adenosine A2a receptors are found in the endothelia, vascular smooth  
muscle cells and cardiac myocytes. The properties of a carbon-11-labeled  
A2a antagonist [11C]KF17837 for myocardial imaging were evaluated by  
dynamic PET scanning of the myocardium in rabbits. Myocardial uptake of  
[11C]KF17837 was clearly visualized by PET. The tracer was taken up at a

high level by the myocardium immediately after the injection, and the myocardial level of radioactivity gradually decreased. On the other hand, an inactive [11C]Z-isomer of [11C]KF17837 showed a very low myocardial uptake and the myocardium was not visualized with a selective A1 antagonist [11C]KF15372. By co-injection with carrier KF17837 or a xanthine type A2a antagonist 7-chlorostyrylcaffeine (CSC), the myocardial uptake of [11C]KF17837 was completely blocked. The effect of non-xanthine A2a antagonists ZM 241385 and SCH 58261, which have a higher affinity than CSC, was smaller than that of the CSC. The effect of weak antagonists caffeine and alloxazine or a xanthine type A1 antagonist KF15372 on the radioactivity level was small. It is concluded that PET with [11C]KF17837 can image myocardial adenosine A2a receptors.

SO Annals of Nuclear Medicine (1997), 11(3), 219-225  
CODEN: ANMEEX; ISSN: 0914-7187  
PY 1997

=> s l7 sss full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 13:30:01 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 174 TO ITERATE

100.0% PROCESSED 174 ITERATIONS  
SEARCH TIME: 00.00.01

52 ANSWERS

L10 52 SEA SSS FUL L7

L11 138 L10

=> d his

(FILE 'HOME' ENTERED AT 13:23:17 ON 12 OCT 2007)

FILE 'REGISTRY' ENTERED AT 13:23:26 ON 12 OCT 2007

L1 STRUCTURE UPLOADED

L2 50 S L1 SSS SAM

L3 5419 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 13:25:34 ON 12 OCT 2007

L4 1502 S L3

L5 18395 S ANXIETY OR POSTTRAUMATIC(A) STRESS(A) DISORDER OR PANIC(A) DISOR

L6 7 S L4 AND L5

FILE 'REGISTRY' ENTERED AT 13:28:35 ON 12 OCT 2007

L7 STRUCTURE UPLOADED

FILE 'CAPLUS' ENTERED AT 13:29:03 ON 12 OCT 2007

S L7

FILE 'REGISTRY' ENTERED AT 13:29:14 ON 12 OCT 2007

L8 1 S L7 SSS SAM

FILE 'CAPLUS' ENTERED AT 13:29:14 ON 12 OCT 2007

L9 1 S L8 SSS SAM

S L7

FILE 'REGISTRY' ENTERED AT 13:30:00 ON 12 OCT 2007  
L10 52 S L7 SSS FULL

FILE 'CAPLUS' ENTERED AT 13:30:01 ON 12 OCT 2007  
L11 138 S L10 SSS FULL

=> s l5 and l11  
L12 1 L5 AND L11

=> d ti

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
TI A method using an adenosine A2A receptor antagonist for treating an anxiety disorder

=> s ti au abs so py  
363566 TI  
1263 TIS  
364505 TI  
(TI OR TIS)  
188587 AU  
1358 AUS  
189862 AU  
(AU OR AUS)  
238189 ABS  
733989 SO  
5911 SOS  
739672 SO  
(SO OR SOS)  
16446 PY  
695 PIES  
17140 PY  
(PY OR PIES)  
L13 0 TI AU ABS SO PY  
(TI(W)AU(W)ABS(W)SO(W)PY)

=> d ti au abs so py  
L13 HAS NO ANSWERS  
L13 0 SEA FILE=CAPLUS ABB=ON PLU=ON TI AU ABS SO PY

=> d ti au abs so py l12

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
TI A method using an adenosine A2A receptor antagonist for treating an anxiety disorder  
IN Kase, Hiroshi; Seno, Naoki; Shiozaki, Shizuo; Kobayashi, Minoru; Kase, Junya  
AB Anxiety disorders, such as panic disorder, agoraphobia, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder, generalized anxiety disorder, specific phobia, or the like, are treated by administering an effective amount of at least one adenosine A2A receptor antagonist (e.g. a xanthine derivative) to a patient in need thereof, optionally in combination with an anxiolytic(s) other than the adenosine A2A receptor antagonist.  
SO PCT Int. Appl., 96 pp.  
CODEN: PIXXD2  
PY 2004  
2004  
2004  
2006  
2006

2006  
2006  
2006  
2006  
2005  
2007

=>

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:41:15 ON 12 OCT 2007

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	0.84

FILE 'REGISTRY' ENTERED AT 11:43:43 ON 12 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

DICTIONARY FILE UPDATES: 11 OCT 2007 HIGHEST RN 950420-07-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\xanthin1.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 11:44:23 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5478 TO ITERATE

36.5% PROCESSED 2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

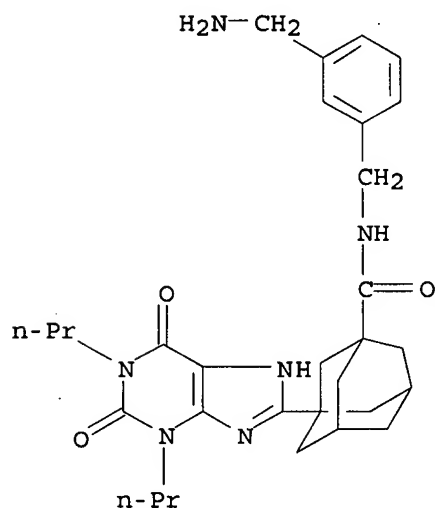
50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 105122 TO 113998  
PROJECTED ANSWERS: 3053 TO 4725

L2 50 SEA SSS SAM L1

=> d scan

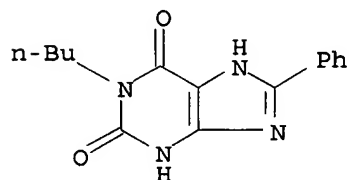
L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxamide, N-[[3-(aminomethyl)phenyl]methyl]-3-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)- (9CI)  
MF C30 H40 N6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 1H-Purine-2,6-dione, 1-butyl-3,7-dihydro-8-phenyl- (9CI)  
MF C15 H16 N4 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l1 sss full

FULL SEARCH INITIATED 11:45:15 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 110331 TO ITERATE

100.0% PROCESSED 110331 ITERATIONS

3427 ANSWERS

SEARCH TIME: 00.00.03

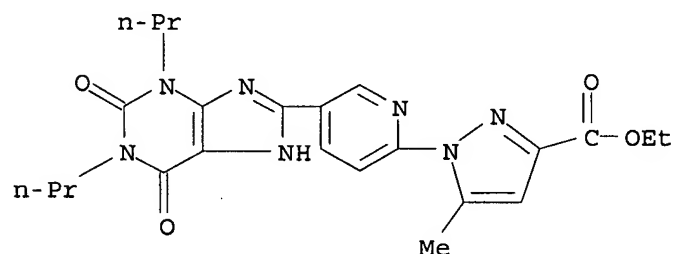
L3 3427 SEA SSS FUL L1

=> d scan

L3 3427 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 1H-Pyrazole-3-carboxylic acid, 5-methyl-1-[5-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)-2-pyridinyl]-, ethyl ester (9CI)

MF C23 H27 N7 O4



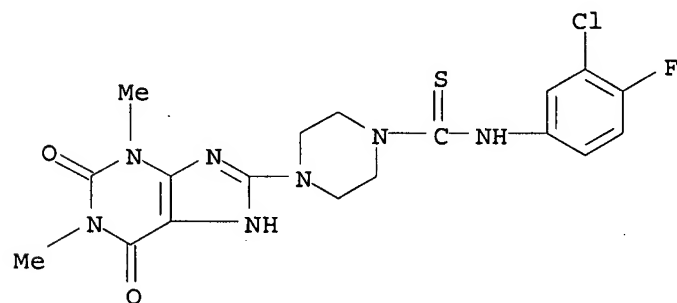
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 3427 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN INDEX NAME NOT YET ASSIGNED

MF C18 H19 Cl F N7 O2 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

173.45

174.29

FILE 'CAPLUS' ENTERED AT 11:46:18 ON 12 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Oct 2007 VOL 147 ISS 17

FILE LAST UPDATED: 11 Oct 2007 (20071011/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

L4 1336 L3

=> s anxiety

17878 ANXIETY

49 ANXIETIES

L5 17914 ANXIETY

(ANXIETY OR ANXIETIES)

=> s l4 and l5

L6 6 L4 AND L5

=> d ti au abs so py 1-6

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synergy of dopamine D2 and adenosine A2 receptors activates protein kinase A (PKA) signaling via  $\beta/\gamma$  dimers, and use in the treatment of drug abuse and drug withdrawal

IN Gordon, Adrienne S.; Diamond, Ivan F.; Yao, Lina

AB The invention pertains to the discovery that a dopamine receptor agonist can activate PKA signaling and/or can act synergistically with an adenosine receptor to activate such signaling. In various embodiments, the invention exploits the synergy between the dopamine receptor pathway and an adenosine receptor pathway to provide methods of mitigating one or more symptoms produced by the chronic consumption of a substance of abuse or to mitigate one or more physiol. and/or behavioral symptoms associated with cessation of chronic consumption of a substance of abuse. In certain embodiments, the methods involve administering to a mammal an effective amount of an adenosine receptor antagonist and an effective amount of a dopamine receptor antagonist, where the effective amount of the adenosine receptor antagonist is lower than the effective amount of an adenosine receptor antagonist administered without the dopamine receptor antagonist.

SO PCT Int. Appl., 152 pp.

CODEN: PIXXD2

PY 2003

2004

- L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI The anxiogenic-like effect of caffeine in two experimental procedures measuring anxiety in the mouse is not shared by selective A2A adenosine receptor antagonists
- AU El Yacoubi, Malika; Ledent, Catherine; Parmentier, Marc; Costentin, Jean; Vaugeois, Jean-Marie
- AB The elevated plus-maze and the light/dark box are two established anxiety tests in rodents, which are useful to screen putative anxiogenic effects of drugs. Caffeine is well known to promote anxious behavior in humans and animal models, but the precise site of action of the drug is still a matter of debate. The present study investigated whether the anxiogenic effects of caffeine observed in mice depend on the blockade of A2A receptor. First, the effects induced by the non-selective drug caffeine were compared with those elicited by two selective A2A receptor antagonists over a wide range of doses in the same exptl. conditions. The effects of A2A or A1 adenosine receptor agonists and of a selective A1 adenosine receptor antagonist were also investigated. Second, wild-type and A2A receptor knockout mice offered another approach to delineate the role played by A2A receptor in caffeine's anxiogenic effects. Mice were exposed to the elevated plus-maze or to the light/dark box for 5 min after acute or chronic administration of tested drugs. Caffeine acutely administered (50 or 100 mg/kg IP) induced anxiety-like effects in both procedures. Its chronic administration (50 mg/kg IP twice daily) for 1 wk or consumption in the drinking water (0.3 g/l) for 8 days or 2 mo were also anxiogenic in the plus-maze test. The A2A receptor antagonists ZM241385 (up to 60 mg/kg IP) and SCH58261 (up to 10 mg/kg IP) were devoid of acute effects in both tests. One week administration of ZM241385 (30 mg/kg IP) or SCH58261 (3 mg/kg IP) had no effects in the plus-maze test. An antagonist (DPCPX) and an agonist (CPA) at A1 receptors had no acute effects on anxiety-related indexes, whereas an A2A receptor agonist (CGS 21680) displayed non-specific motor effects in the plus-maze test. Acute administration of caffeine (50 mg/kg IP) induced no clear-cut anxiety-like effects in the plus-maze test in A2A receptor knockout mice that exhibited higher basal anxiety levels than wild-type mice. Chronic administration (50 mg/kg IP twice daily) for 1 wk elicited less anxiety-like behavior in A2A receptor knockout than in wild-type mice. Adaptative mechanisms following mutation in A2A receptors or their long-term blockade after chronic ingestion of caffeine may be responsible for increase proneness to anxiety. However, the short-term anxiety-like effect of caffeine in mice might not be related solely to the blockade of adenosine A2A receptors, since it is not shared by A2A selective antagonists.
- SO Psychopharmacology (Berlin) (2000), 148(2), 153-163  
CODEN: PSCHDL; ISSN: 0033-3158
- PY 2000
- L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI The Effects of Adenosine Ligands R-PIA and CPT on Ethanol Withdrawal
- AU Gatch, M. B.; Wallis, C. J.; Lal, H.
- AB The potential anxiogenic or anxiolytic effects of R(-)-N6-(2-phenylisopropyl)adenosine (R-PIA), an adenosine agonist, and 8-cyclopentyl-1,3-dimethylxanthine (CPT), an adenosine antagonist, were tested during chronic exposure to ethanol and to ethanol-induced withdrawal in rats. Effects on anxiety were measured by the elevated plus maze and dark-light box. Ethanol consumption and preference was tested in an addnl. experiment. In testing of elevated plus maze performance during withdrawal from ethanol, R-PIA produced no change in the anxiety-related behaviors of total arm entries and percent open arm entries, but produced a significant decrease in percent open arm time. CPT produced at least partial recovery from the anxiogenic effects of ethanol withdrawal on all three measures of elevated plus maze

performance, although peak effects were seen at the intermediate dose of CPT (0.08 mg/kg) for total arm entries and percent open arm time. CPT also showed anxiolytic effects at low to intermediate doses (0.04, 0.08 mg/kg) in the dark-light box. CPT did not reduce the preference for ethanol over water or the total consumption of ethanol over a range of ethanol doses. In summary, the adenosine agonist, R-PIA, exacerbated the effects of ethanol withdrawal, whereas the adenosine antagonist, CPT, at least partially blocked the anxiogenic effects produced by ethanol withdrawal. These results suggest that adenosine antagonists, at least at some doses, may be useful for ameliorating the anxiogenic effects produced by ethanol withdrawal, although it does not appear useful for reducing consumption.

SO Alcohol (New York) (1999), 19(1), 9-14  
CODEN: ALCOEX; ISSN: 0741-8329  
PY 1999

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Adenosine A1 receptors modulate anxiety in CD1 mice  
AU Florio, Chiara; Prezioso, Anita; Papaioannou, Aristotele; Vertua, Rodolfo  
AB The effect of the selective adenosine A1 receptor agonist 2-chloro-N6-cyclopentyladenosine (CCPA) was investigated in CD1 mice by the elevated plus-maze and the light/dark test, two models for measuring anxiety in rodents. CCPA, administered i.p., had an anxiolytic effect at 0.3 nmol/kg in the elevated plus-maze and at 1 nmol/kg in the light/dark test. Brain levels of 22 nM were found after administration of 100 nmol/kg CCPA, as measured by ex vivo binding expts. These values are consistent with the occupancy of adenosine A1 but not A2 receptors by CCPA, and suggest that the anxiolytic-like action of CCPA may be mediated by centrally located adenosine A1 receptors. Both CPT, a selective adenosine A1 receptor antagonist, and IBMX, a non-selective adenosine antagonist, had an anxiogenic effect in the two tests. It is thus possible that purinergic neurons may be involved in the tonic modulation of affective state in mice.

SO Psychopharmacology (Berlin) (1998), 136(4), 311-319  
CODEN: PSCHDL; ISSN: 0033-3158  
PY 1998

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Effects of xanthine derivatives in a light/dark test in mice and the contribution of adenosine receptors  
AU Imaizumi, Masahiro; Miyazaki, Shuichi; Onodera, Kenji  
AB We investigated the effects of adenosine receptor antagonists, caffeine, theophylline, 8-phenyltheophylline, and 8-cyclopentyl-1,3-dipropylxanthine (DPCPX), in a light/dark test in mice. All antagonists decreased the time spent in the light zone in this test, which suggested that these compounds have anxiogenic effects. The anxiogenic effects of theophylline were reduced by pretreatment with CGS 21680, an A2-selective agonist, but not by N6-cyclopentyladenosine (CPA), an A1-selective agonist. However, the antagonism of the theophylline-induced anxiogenic effects by CGS 21680 was only observed in the time spent in the light zone, and DPCPX-induced anxiogenic effects were neither reversed by CGS 21680 nor by CPA. Finally, it is notable that xanthine-derived adenosine antagonists tested here commonly showed anxiogenic effects in the light/dark test in mice. It is suggested that there is a minor contribution of adenosine receptors to these effects, although theophylline-induced anxiogenic effects were antagonized by an A2 receptor agonist.

SO Methods and Findings in Experimental and Clinical Pharmacology (1994), 16(9), 639-44  
CODEN: MFEPDX; ISSN: 0379-0355  
PY 1994

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
TI 8-Substituted theophyllines for alleviating anxiety in mammals  
IN Stein, Herman Hal; Goodsell, Elizabeth

GI For diagram(s), see printed CA Issue.  
AB The title substituted theophyllines (I, R=Me, Et, Pr, iso-Pr, pentyl, cyclopentyl, hexyl), useful in the treatment of depression were prepared from 5,6-diamino-1,3-dimethyluracil and an acid RCO<sub>2</sub>H (Hager, et al., CA 49: 3179d).  
SO U.S., 3 pp.  
CODEN: USXXAM  
PY 1971

```
=> s generalized(a)anxiety(a)disorder
      86657 GENERALIZED
        1 GENERALIZEDS
      86657 GENERALIZED
        (GENERALIZED OR GENERALIZEDS)
      17878 ANXIETY
        49 ANXIETIES
      17914 ANXIETY
        (ANXIETY OR ANXIETIES)
      264989 DISORDER
      210155 DISORDERS
      422688 DISORDER
        (DISORDER OR DISORDERS)
L7      420 GENERALIZED(A)ANXIETY(A)DISORDER
```

=> d his

(FILE 'HOME' ENTERED AT 11:41:15 ON 12 OCT 2007)

FILE 'REGISTRY' ENTERED AT 11:43:43 ON 12 OCT 2007

```
L1      STRUCTURE UPLOADED
L2      50 S L1 SSS SAM
L3      3427 S L1 SSS FULL
```

FILE 'CAPLUS' ENTERED AT 11:46:18 ON 12 OCT 2007

```
L4      1336 S L3
L5      17914 S ANXIETY
L6      6 S L4 AND L5
L7      420 S GENERALIZED(A)ANXIETY(A)DISORDER
```

=> s l4 and l7

```
L8      0 L4 AND L7
```

=>